

**Goat Anti-BMP7 Antibody (aa120-131) (internal region)**  
Catalog # AF4301a**Specification****Goat Anti-BMP7 Antibody (aa120-131) (internal region) - Product Information**

Application	WB, E
Primary Accession	<a href="#">P18075</a>
Other Accession	<a href="#">NP_001710.1</a> , <a href="#">85272</a> , <a href="#">12162</a> , <a href="#">655</a>
Reactivity	Pig
Predicted	Human, Mouse, Rat, Pig, Dog
Host	Goat
Isotype	IgG
Calculated MW	49313

**Goat Anti-BMP7 Antibody (aa120-131) (internal region) - Additional Information****Gene ID** 655**Other Names**

Bone morphogenetic protein 7, BMP-7, Osteogenic protein 1, OP-1, Eptotermin alfa, BMP7, OP1

**Dilution**

WB~~1:1000

E~~N/A

**Immunogen**

This antibody is expected to recognize precursor only.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-BMP7 Antibody (aa120-131) (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-BMP7 Antibody (aa120-131) (internal region) - Protein Information****Name** BMP7**Synonyms** OP1**Function**

Growth factor of the TGF-beta superfamily that plays important role in various biological processes, including embryogenesis, hematopoiesis, neurogenesis and skeletal morphogenesis (PubMed:&lt;a href="http://www.uniprot.org/citations/31208997" target="\_blank"&gt;31208997&lt;/a&gt;). Initiates the canonical BMP signaling cascade by associating with type I receptor ACVR1 and type II

receptor ACVR2A (PubMed:[12667445](http://www.uniprot.org/citations/12667445), PubMed:[9748228](http://www.uniprot.org/citations/9748228)). Once all three components are bound together in a complex at the cell surface, ACVR2A phosphorylates and activates ACVR1. In turn, ACVR1 propagates signal by phosphorylating SMAD1/5/8 that travel to the nucleus and act as activators and repressors of transcription of target genes (PubMed:[12478285](http://www.uniprot.org/citations/12478285)). For specific functions such as growth cone collapse in developing spinal neurons and chemotaxis of monocytes, also uses BMPR2 as type II receptor (PubMed:[31208997](http://www.uniprot.org/citations/31208997)). Can also signal through non-canonical pathways such as P38 MAP kinase signaling cascade that promotes brown adipocyte differentiation through activation of target genes, including members of the SOX family of transcription factors (PubMed:[27923061](http://www.uniprot.org/citations/27923061)). Promotes the expression of HAMP, this is repressed by its interaction with ERFE (PubMed:[30097509](http://www.uniprot.org/citations/30097509)).

#### Cellular Location

Secreted.

#### Tissue Location

Expressed in the kidney and bladder. Lower levels seen in the brain

### Goat Anti-BMP7 Antibody (aa120-131) (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-BMP7 Antibody (aa120-131) (internal region) - Images



AF4301a (1 µg/ml) staining of Pig Kidney lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.